Chazara persephone (Hübner, [1805]) or Chazara anthe (Hoffmansegg, 1806) – what is the valid name? (Nymphalidae, Satyrinae)

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In all his publications, Koçak (for example 1982: 166; 2001: 6; see also Lukhtanov & Lukhtanov 1994) used the name *anthe* Hoffmansegg, 1804 [note the year of publication!] for the taxon in question. As this is in contradiction to most other authors who used the name *anthe* Ochsenheimer, 1807 or *persephone* Hübner, 1803 (e.g. Gaede 1931: 116; Wyatt & Omoto 1981) or *persephone* Hübner, [1805] (Karsholt & Razowski 1996), the author of this note tried to establish which name really is the valid one according to the most actual version of the International Code of Zoological Nomenclature (ICZN 1999).

The history of the relevant species-group names is as follows:

Fabricius (1793) introduced in his *Entomologia systematica* III(1): 174 the name *Papilio persiphone* for a butterfly taxon from tropical Africa. This name is currently understood as a junior subjective synonym, and the species in question is known in the combination *Acraea egina egina* (Cramer, [1775]) (see Ackery *et al.* 1995: 236).

Hübner ([1805]) in his *Sammlung europäischer Schmetterlinge*, pl. 115, figs. 589-590, figured under the name *Papilio persephone* a Palaearctic butterfly species currently known in the combination *Chazara persephone* (Nymphalidae: Satyrinae). In the text volume to his *Sammlung europäischer Schmetterlinge* the paragraph relevant to this species appeared (on p. 21) one year later [1806]. Therein Hübner names "Rußland, bey Sarepta" as the type locality and remarks: "Aus der Sammlung des Hrn. Büringer in Gunzenhausen." This is the species dealt with here.

Esper ([1805]) in the Supplementband der Europäischen Schmetterlinge 2: 21, again published the same name Papilio persephone for a taxon today placed in the genus Erebia Dalman, 1816 (Nymphalidae: Satyrinae) from the Western Alps. According to Hemming (1937), Hübner's plate 115 with persephone came out before the end of 1805. As no exact publication date exists for persephone Esper, 1805 (Poche 1938: 19) one has to take 31.xii.1805 as its publication date according to ICZN, Article 21. Therefore the name Papilio persephone Esper is a primary homonym of Papilio persephone Hübner.

Hoffmansegg (1806), in his *Erster Nachtrag* zu seinem *Alphabetischem Verzeichnisse von Hübner's Papilionen* wrote (on p. 182) with reference to the species in question: "*Persephone*. T. 115. F. 589. 590. * *Anthe* Böber. Böber hat diesen Schmetterling in Süd Russland entdekkt, und ihn *Anthe* genannt. Dieser Name bleibt ihm mit desto mehr Recht, da der Hübnerische wegen Collision mit *Persephone* Fab. ohnehin nicht anzunehmen wäre." This is all of the text in Hoffmansegg's work pertinent to *persephone*.

In view of these facts it remains to ascertain: (1) The taxon described by Fabricius, 1793 was not named Papilio persephone but persiphone. (2) Papilio persiphone Fabricius, 1793 and Papilio persephone Hübner, [1805] are not primary homonyms (ICZN, Article 57.6: one-letter difference). (3) The asterisk (*) preceding "Anthe Böber" in the above cited text means according to Hoffmansegg (1804: 182) that this is "der Name, der den übrigen vorgezogen werden muß" [translated: "... the name that must be preferred over the others"]. Johann de Boeber († 1820 in St. Petersburg) collected insects in South Russia (Horn & Kahle 1937: 321). (4) There is no reason to presume, that Boeber himself described and published the name anthe (cf. Horn & Schenkling 1928: 92). Instead, he merely gave the discovered new butterfly an informal name as it was the use of collectors at that time when mailing material to other persons. (5) In merely adopting the informal name suggested by Boeber, the real author of the name anthe is Hoffmansegg, 1806 in the sense of the Code. (6) One could assume that Fabricius (1793) made an inadvertent error (lapsus calami) (ICZN, Article 32.5.1) in writing persiphone instead of persephone. Persephone is the Greek name of the Roman Proserpina (Heinichen 1931: 428). Since the derivation of the name is doubtless on etymological grounds, according to ICZN, Article 19.2 indeed Papilio persephone Fabricius, 1793 could be the oldest available name (justified emendation). But this is not the case. There is no clear evidence of an incorrect original spelling as it is required by ICZN, Article 32.5. In the text of Fabricius (1793) the name persiphone appears twice and no demonstrably intentional change in the original spelling (ICZN, Article 33.2.1) is to find in Fabricius' own work. Therefore, Papilio persephone Fabricius, 1793 can not be deemed as a justified emendation; it is an unjustified emendation and incorrect subsequent spelling (ICZN, Article 33.3) of Hoffmansegg (1806) and subsequent authors. (7) From the text of Hoffmansegg (1806) can not be concluded without doubt that he wished to introduce the name anthe as a replacement name for persephone Hübner, [1805]. The type material came from different sources: Papilio persephone Hübner from Büringer, anthe Hoffmansegg from Boeber. Therefore anthe Hoffmansegg, 1806 can not be deemed as an replacement name and not as an objective synonym, but only as a junior subjective synonym of Papilio persephone Hübner, [1805].

Subsequently, Ochsenheimer (1807: 169) used the name *anthe* with reference to "Hübner, Pap. Tab 115, fig. 589, 590, Text S. 21. *P. Persephone*" and to Hoffmansegg in "Illiger, Mag. V. ... S. 182", following the opinion of the latter. Neglecting these references to Hübner and Hoffmansegg, many authors during the 19th and early 20th century, especially of German language, incorrectly used the name *anthe* Ochsenheimer, 1807 whilst in the same time period most authors of English language correctly used the name *persephone* Hübner, but combining it with 1803 as publication year.

Koçak (1982) and Lukhtanov & Lukhtanov (1994) in their publications are in error combining the name *anthe* Hoffmansegg with 1804 as the year of publication, because Hoffmansegg (1804) in his *Alphabetisches Verzeichniss zu J. Hübner's Abbildungen der Papilionen* ... nowhere mentions the name *anthe*.

From these investigations the following synonymic list results:

- Papilio persephone auctorum: **Incorrect subsequent spelling** of the name *Papilio persiphone* Fabricius, 1793 (cf. Hoffmansegg 1806; Ackery *et al.* 1995).
- Papilio persephone Hübner, [1805]: The oldest available name for the taxon currently known as *Chazara persephone*.
- Papilio persephone Esper, [1805]: Junior primary homonym of Papilio persephone Hübner, [1805].
- Papilio anthe Hoffmansegg, 1806: Junior subjective synonym of Papilio persephone Hübner, [1805].
- Papilio anthe Ochsenheimer, 1807: Error of subsequent authors in the attribution of author to the name Papilio anthe Hoffmansegg, 1806.
- *Papilio persephone* Hübner, 1803: **Unavailable name**, error of subsequent authors in the year of publication.
- Chazara anthe Hoffmansegg, 1804: Unavailable name, error of subsequent authors in the year of publication.

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